

JESSICA NAHULAN

Cell: (613) 583-1936

E-mail: jessica.nahulan@queensu.ca

Address: 607-64 Ontario Street, Kingston, ON K7L 5J4

OBJECTIVE

To obtain a Software engineering position where I can apply my engineering skills to gain valuable and practical professional experience. I am a hardworking, dedicated, and motivated individual with exceptional work ethic looking for exciting opportunities. I have extensive experience in engineering, project management, design projects and mobile/web development.

EDUCATION

Bachelor of Applied Science (3rd year)

[May 2017]

Queen's University, Kingston, Ontario

Discipline: **Computer-Software Engineering**

Awards: Queen's University Principals Scholarship for excellent academic performance

Relevant Courses:

Data Structures and Algorithms, Computer Architecture, Software Development, OOP (Java), Operating Systems, Microprocessor Systems, Computer Networks, Database Management Systems, Data Mining, Quality Assurance and Computer Graphics

WORK EXPERIENCE

Software Developer - Eclipse, Java, EAGLE

[September 2015 – Present]

Ground Station GUI - Queen's Aero Design Team

- Collaborated with team members in order to create and optimize code for the plane's ground station interface.
- Worked with code using the RXTX Library for serial communication between the plane and ground station.
- Modified the GUI to allow for video feed, GPS utilization, and hot keys to trigger the plane to drop or make turns.

Problem Analysis Mentor

[September 2014 – December 2014]

Queen's University - Department of Computer Engineering (Sponsored by KRONOS), Kingston, Ontario

- Managing first year students in developing an iOS application (in Objective-C) for course scheduling and organization
- Providing feedback on projects to Faculty Advisors, Course Coordinator, and Program Associate
- Ensuring the teams remain focused on their projects and on-schedule for timely completion
- Providing results and application overview to client company KRONOS for further implementation as a workforce management solution.

Technical Analyst

[June 2014 – August 2014]

AKC Contracting & Supply, Doha, Qatar

- Created Python scripts to automate the extraction of required information from the Operations server and sending email reports to the respective employees
- Developed excel macros for organizing the extracted information and illustrating it using charts/tables that enhanced the evaluation of team's progress by the manager
- Collaborated with team members to develop, test and upgrade an AKC supported software using agile methodology
- Effectively communicated with manager to analyze daily tasks and implement scripts that increased the team's overall efficiency

Trainee Sales Associate

[April 2012 – August 2012]

Furntex Global Impex Inc., Mississauga, Canada

- Assisted in promoting sales and selling store goods.
- Worked at the front desk, receiving phone calls and dealing with customer inquiries.

TECHNICAL SKILLS

Programming:

- C, C++, Java, Python, C#, VHDL, Verilog, SQL, PHP, HTML, CSS, JavaScript, jQuery, Arduino, Nxt Robots (Robot C), .NET
- Knowledge of Databases, Data Structures and Algorithms, Android mobile application development and prototyping.

Software Applications:

- **Eclipse/Visual Studio:** Experience developing C++/Java/C# projects and working on front-end GUI interfaces.
- **Android Studio:** Developed both independent projects as well as start-up applications.
- **MATLAB:** Experience in plotting and analyzing mathematical functions.
- **Git/Svn/Redmine:** Experience using version revision control systems in team settings.

- **KNIME:** Proficient in preprocessing, modeling, and analyzing data along with exercising various other data mining tools.
- **MySQL/PhpMyAdmin/Microsoft SQL Server:** Experience creating and managing databases. Familiar with complex queries.
- **CAD - Solid Edge:** Experience designing 2-D and 3-D models.
- **Adobe Creative Suite/Corel:** Extensive experience with Photoshop CS6, Adobe Illustrator, and Corel Painter.
- **Operating Systems:** Proficient using Windows, LINUX, and MAC. Windows – Preferred OS.
- **Microsoft Office Suite:** Professional experience using Microsoft Office programs including PowerPoint, Excel, and Visio.

Hardware:

- **Arduino:** Programmed Arduino boards to make a Robot perform specific tasks using various sensors.
- **FPGA Programming:** Hands on experience using Altera Processor 32 bit NIOS-II embedded processor and Quartus II.
- **EAGLE:** Designed printed circuit board schematics for various uses and as to given specifications.

PROJECT EXPERIENCE

Web-based Database Application Development - MusicMatesInc. – In Progress

[January 2016 – Present]

PHP, SQL, HTML/CSS, XAMPP

- Lead back-end programmer in a team working for the local organization: MusicMatesInc. Created a database system to allow client registry and payment information retrieval. Work in progress includes the connection of web pages/forms, and verification of the submitted and retrieved data, along with the client login/logout system.
- Applied database design techniques to create the database schema, and used MySQL and PHP to create the database application to support users in querying and manipulating the database.

2-D Game Development – Implementation of Mancala board game

[September 2015 – December 2015]

Eclipse, Visual Studio, C++, C#, Git, Redmine

- Project Manager and Lead front-end GUI Designer and programmer.
- Collaborated with a team in order to rapidly design, develop, test, and implement the application prototype
- Worked with the back-end team writing unit tests and test cases in order to verify the application's operation
- Member of the debugging team in application's final pre-presentation phase. Exercised various debugging techniques

AICOG – Smartphone and Pebble app

[September 2015]

Android Studio, Java, C, Git

- Developed a prototype for a cognitive alarm clock which requires the user solving mini-games in order to turn off the alarm, assuring user awareness. Application is cross-platform and integrates a Pebble watch in sync with the phone app.
- Lead back-end programmer for the Android app component – Developed using Android Studio.

Website Development

[May 2015 – June 2015]

- Experience using HTML, CSS, Adobe Photoshop whilst working independently on website design and creation.

Disease Prevention and Control by NanoRobot Technologies

[September 2014 – December 2014]

- Developed a macroscale model of a nano-bot using Arduino and modified its circuitry according to design specifications.
- Programmed the robot to use its various sensors to perform certain tasks including map navigation.

EXTRA CURRICULAR ACTIVITIES

Note Taker and Course Assistant – Volunteer Position

[January 2016 – Present]

Queen's Student Accessibility Services – Queen's University, Kingston, Canada

Volunteer instructor for children's Lego Robotics workshops

[January 2015 – Present]

Queen's Robogal's, Queen's University, Kingston, Ontario

Communications Team member

[September 2014 – April 2015]

Engineering Society, Queen's University, Kingston, Ontario

Commissioning Digital Artist / Graphic Designer

[January 2014 – Present]

Independent work

Member: Queen's Engineering Society, IEEE, GitHub, Code the Change, Queen's Coding Club, Queen's South Asian Association

Additional Experience: Tutoring, Student Teaching Assistant, Contributing artist to Queen's club: QCBL

Competitions/Events: Hack The North, Queen's Engineering Design Competition, International SAE Aero Design Competition

PROFESSIONAL CERTIFICATIONS

- **WHMIS**